

# Don't jump if the wall is too high

2017-11-27 : 16:19

By Spencer H. Kim

Sometimes you really want to do something because it would be so cool, but facts get in the way. Try as you might, you won't be able to do it. Giving up is hard, but it's the smart thing to. Plan B is there for a reason.

I have become convinced Plan B is the best approach for Korea to take when it comes to trying to compete in the advanced technology defense sector.

After spending several weeks in Korea in late summer, attending the Seoul International Aerospace and Defense Exhibition in October, listening to Seoul's ambitions to develop its own advanced weaponry, and doing a review of global defense technology trends, I say, "Don't jump, that wall is too high."



Instead of wasting money on costly research and development, and licensing technology already a generation old, spend wisely on defense equipment that meets Korea's needs. Avoid the temptation to succumb to national pride and the hubris of thinking that a middle power is going to be able to spend with the U.S. or China, or even Russia. Korea can spend a lot, by Korean standards, but it will always lag behind.

How did I come to this conclusion? As CEO of an aerospace company, I do a review every year of relevant information to discern trends and gauge the state of the industry. Three things leapt out at me when I did my latest review.

First, the U.S., as indicated in such documents as "Air Superiority Flight Plan 2030," is looking to drop the idea of creating operational criteria for a new aircraft and then trying to bend technology to the criteria (see the fits and starts in the KF-X aircraft program, which takes the same approach). Instead, more effort will be put into pure research and development and, when a new technology is created, build the new weapon around the technology.

The U.S. plan for a new "penetrating counter-air" weapon looks to break out of the old mentality of "fighter" or "bomber" and create a flying thing, manned or unmanned, with perhaps a mother aircraft controlling a swarm of drones, lasers and missiles using self-contained sensors for both self-defense and stand-off or direct attack. In other words, Star Wars stuff is coming. And it will not be cheap.

Second, in reviewing the U.S. Department of Defense's annual report on U.S. industrial capabilities, I noticed a strong trend in the consolidation, and increased profitability, of the big remaining defense contractors that are "system integrators" — those companies that get the major system contract and pull everything together from a system of subcontractors. That population is now down to just six — Lockheed Martin, Northrup Grumman, Raytheon, BAE Systems, General Dynamics and Boeing — that are fiscally strong and now have a kind of monopolistic lock on their industry.

In looking at the EBITDA margins (earnings before interest, taxes, depreciation and amortization; used as an indicator of the overall profitability of a business) over the past 10 years for those companies, we see a steady increase to well above 10 percent. This reflects a steady stream of cash. They will be able to fund research and development on a scale unreachable by any Korean private company, and the Korean treasury as well. Increased U.S. defense spending will just exacerbate this situation.

Third, the looming role of artificial intelligence (AI) in defense products. When AI becomes more integrated into aircraft, ships, missiles, radars and satellites, their capabilities are going to increase exponentially. The AI race is on between the U.S. and China as regards its integration into defense hardware. Korea might well have a role to play in adapting AI to commercial products such as smart grids, smart cities and the internet of things, but it will never be able to play in the costly and rapidly changing, and geometrically ever more expensive, defense development game.

For Korea, look strongly at Plan B. Step 1: What does Korea really need? Step 2: Procure it. Step 3: Integrate it. Step 4: Forget about being a player in the indigenous development of sophisticated defense products; no matter how much it may seem cool, it is the road to waste and frustration.

*Spencer H. Kim is CEO of CBOL Corp., a California aerospace firm. He is a member of the Council on Foreign Relations, a co-founder of the Pacific Century Institute and was a fellow at Harvard's Ash Center for emocratic Governance and Innovation 2012-2013.*